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STRENGTHENING SOUTH-SOUTH BUSINESS TIES ON AGRICULTURAL MACHINERY AND RURAL ENERGY*

by

Wilfredo A. Clemente III**

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** Adviser, ESCAP-Regional Centre for Technology Transfer, Bangalore, India.

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On behalf of the ESCAP Regional Centre for Technology Transfer (RCTT), may I express our appreciation for the invitation to address this important meeting. RCTT, a United Nations regional institution, was established in July 1977 to assist countries of Asia and the Pacific, through regional cooperation, in strengthening their national capabilities in technology development, transfer and information. RCTT has always endeavoured to bring its efforts in technology development, transfer and information as close as possible to actual trade and industry. Thus, it always welcomes every opportunity, such as this, to have a dialogue with the various entities in the public and private sectors who play a crucial role in syndicating technology ventures.

Strengthening South-South ties in trade and technology has always been a major preoccupation of third world countries as reflected in the many pronouncements and agreements made in various international, regional and sub-regional fora and in bilateral transactions.

While this objective has long been clear to third world countries with pronouncements getting louder everyday, the implementation, unfortunately, remains very slow. Traditional obstacles still exist. Many third world countries are still tied to traditional trading partners in the North. Many of the commerciable technologies in the South originate from North-based MNCs which reduce their subsidiaries in the South to the role of cheap manufacturers and assemblers of components or products to be exported to the mother companies in the North. Since most of the countries in the South are emerging from an agricultural base, they find themselves in a similar situation of producing the same items thereby reducing the opportunities for exchanging different goods.

The strengthening of South-South business ties is a function of communications, promotion and mutually beneficial

transactions in that order. It is against this framework that we shall review the problems in strengthening South-South business ties in agricultural machineries and rural energy.

In communications, it appears that many firms in the South dealing with agricultural machineries and rural energy, particularly those wholly owned by nationals, are not linked to commercial channels of communications in their respective countries. The situation is worst in linking to clearing-house type trade journals with regional and international circulation. It is rather disturbing to note that magazines supposedly for Asia and the Pacific such as the Far Eastern Technical Review, Asian Agriculture, Asiaweek and Asian Building News Review feature primarily products/processes from the North. Sadly, even the trade and industry section of many national papers in Asia and the Pacific tend to carry more items of products/processes from the North. This is so because Northern companies or their governments' trade attaches have the material ready for press releases.

In trade exhibitions, RCTT monitors and liststrade fairs in the region related to RCTT's priority areas. We observe that except for affluent Southern countries like Japan and Korea, most of the exhibitors are companies from the North.

In using technology exchange announcements and export magazines to promote the products/processes, we also observe that except for the few affluent Southern countries such as Japan, Korea, Singapore, Brazil, Mexico and Argentina, most of the countries in the South do not have the resources to mount an aggressive and elaborate promotion programme through this channel.

The same situation holds true in the promotion of products/processes through agents of technology be they from the government or private firms.

NGO's, governments and international organizations are carrying out activities which try to fill the gap on behalf of firms in the South. These entities, for example, put out magazines on agricultural machineries and rural energy. They also serve as clearing-houses for the exchange of information - i.e. Australia's CSIRO for the Commonwealth REgional Energy Resources Information System, the Asian Institute of Technology for the Renewable Energy Information Centre, ESCAP for the Regional Network on Agricultural Machineries and for the Agricultural Information Development Bulletin, IRRI and Technonet for both agricultural machineries and rural energy and NGOs such as Approtech, Intermediate Technology Group, VITA and Tranet for both agricultural machineries and rural energy. The Asia Press Foundation's Depthnews, IDRC's Technology Features and RCTT's Asia-Tech also feature products and processes of countries from the South in the mass media. Government S&T institutions within a region usually exchange also material although I must say that their packaging of the material does not possess the aesthetic quality that would make the material appealing to potential users. India, for example, has a wealth of indigenous technologies but the product catalogue/ brochures lack the glossy touch to catch the attention of potential users.

For agricultural machineries, ESCAP's Regional Network on Agricultural Machineries established in 1978 has been very active in promoting joint cooperation among countries in Asia and the Pacific in design, standardization and local manufacture of agricultural machineries. For rural energy, various UN agencies have been involved in promoting devices, products or processes. The referral services of FAO, UNIDO, WIPO and RCTT likewise have been active in linking interested entrepreneurs to different sources of technology on agricultural machineries and rural energy.

These efforts, while laudable and providing a catalytic effect, however could not substitute for bringing firms in the South into the mainstream of commercial channels of communication. There is something about linking to a commercial channel such as the mass media which gives a product not only wider exposure but more credibility than when it is being promoted through in-house publications.

If firms in the South are not well linked to commercial channels of communication - which means that their products are not being promoted well - then the opportunities for South-South transactions are considerably minimized.

Compounding the problem of firms in the South not knowing what their colleagues are doing is the lack of standardization and testing of the products/processes. This problem is slightly alleviated in the case of agricultural machineries in Asia and Pacific due to the efforts of RNAM in assessing the products and in encouraging the establishment of standards in various countries. The case of rural energy, however, is different. Besides being new on a commercial level, many of the products/processes have yet to be tested for their efficiency, applicability and acceptability to local conditions.

On bio-gas digesters, much has been done in India and China and there are variants of models offered by both countries. Besides the question of local applicability at the technical level, there is also a cultural problem on their acceptability especially on the part of Southeast Asian and Pacific countries which are not accustomed to handling night soil. In Fiji, for instance, bio-gas digesters would work with the Indian population but would not succeed with the Fijian population.

On the briquetting of agricultural wastes, India and the Philippines have produced machineries/processes. So have Mexico and Brazil. There is still room for wider utilization and improvement of the state of the art not between countries but within the above countries themselves.

For domestic stoves, RCTT has been very active in promoting them. From what we see of stoves from the Carribbean, Latin America, Africa and Asia, there is still a need to establish the efficiency as well as promote the wider use of the stoves.

In solar energy, Tahiti leads many countries in the world, on a per capita basis, in the use of solar heaters for homes but neither this fact nor trend is known nor shared by its neighboring Asian and Pacific countries. Much work has been done on solar drying of agricultural products and lumber in India, the Philippines and Thailand but these technologies still need to be promoted. China and Pakistan are working on solar powered pumps and these devices are still being assessed by a World Bank/UNDP project. For solar-powered generators, Australia and Tahiti have been active in this area while other countries are just exploring it.

For wind energy, many of the commerciable devices come primarily from the United States and Europe. Thai sail windmills have been adopted in some Indian villages. Over-all, technologies in wind energy still need to be tested and improved.

In dendro-thermal, the Philippines leads most countries in wide-scale tree plantations to generate energy. The Philippine experience is now being watched closely by many countries.

For hydro-electric power, RCTT, UNIDO and other UN agencies have been active in providing opportunities for the exchange or experiences and in making available technical consultants. Many countries in the South, on their own, have taken a keen interest in this area.

Technically, many firms in the South know about the potential value of renewable energy for rural use. The problem, as mentioned earlier, is to establish the efficiency and applicability to local conditions of the products/processes.

The third problem is the difficulty of many firms in the South engaged in agricultural machineries and rural energy to link to the effective demand. This is a matter of knowing what the demand is and promoting the products to the potential users. There are many useful products/processes that end up in shops or bookshelves because they are not linked to the effective demand.

In this connection, it is worthwhile to recall the reaction of advocates of S&T in blaming their difficulties to a public that do not appreciate efforts in S&T. While there may be some truth to this assessment, I am inclined, on the other hand, to blame advocates of S&T for not knowing how to link to the effective demand - of knowing the market, spotting the opportunities, exploiting the linkages and promoting the products.

In view of the above problems, it is logical that the following course or action should be undertaken.

1. Firms in the South dealing with agricultural machineries and rural energy should link to the commercial channels of communication especially those with regional and international coverage.

2. There should be better standardization and assessment of the efficiency of products/processes in agricultural machineries and rural energy.

3. Firms in the South dealing with agricultural machineries and rural energy should link to the effective demand.

It is rather easy to diagnose problems and prescribe solutions in the above manner and as repeated frequently in many standard policy papers on S&T. What is difficult, however, is to establish what could really be achieved. To avoid falling into the same mistake of prescribing what should be done, I would like to suggest a more pragmatic approach for the future, namely, that government S&T and trade agencies, the chambers of commerce and manufacturers associations and the mass media and extension service firms should join hands,

in a synergistic fashion, to help firms in the South link to commercial channels of communication and promote their products.

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